



EcoStruxure Power Monitoring Expert (PME) is a purpose-built software platform deployed at customers servers that simplifies power management providing rich energy visualization and power event analysis for more efficient and reliable operations. It is particularly ideal for mitigation of energy wastage and service disruptions due to power outages and electrical disruptions in large buildings and critical facilities. It features a comprehensive set of web-based applications including dashboards, diagrams, trends, alarms and reports to deliver deep insights into electrical system performance, energy efficiency and power quality. PME is powerful, scalable, easy to use and designed to integrate into other management systems.

APPLICATION	FUNCTION
Alarms	View and analyze incidents, Alarms, and Events; Acknowledge alarms
Dashboards	View high level, historical and real-time data in dashboards and devices
Diagrams	View low level, historical and real-time data in one-line and graphics diagrams
Reports	Run reports on demand or scheduled
Trends	View trends for real-time and historical data

Salient software system features include:

- Certified Energy Data Management System in accordance with ISO5001, ISO5002 and ISO5006 standards sections that include energy baseline, data collection, performance indicators, analysis, audit reporting and review.
- Certified to Cybersecurity standard at the component level (IEC62443-4-1 and IEC62443-4-2 SL1) ensuring data in transit is protected through encryption and certificate validation between PME and connected devices.
- Reports for multiple Power Quality compliance standards including EN50160, IEC61000-2-4 and IEEE 519.
- Native support for multiple power devices including power meters, uninterruptible power supplies (UPS), active harmonic filters, capacitor bank controllers, variable speed drives and EV chargers.
- Support for devices with standard industry communication protocols such as Modbus TCP/RTU, ION and OPC DA.
- Optional Software Assurance to allow PME upgrades to the latest released PME version.

PME deployment is carried out on computers/servers appropriately sized and provisioned with Windows Server/Pro/Enterprise operating systems and SQL Server databases as per PME IT guide. The system requires Base License (Standard or Express) and Device Licenses as a minimum to operate.

LICENSE	DETAILS
PME Standard Base License	Required license that includes two Client Access licenses, one of which is assigned to the system as supervisor user. Suitable for both standalone and distributed database systems.
PME Express Base License	Alternative to Standard Base license but with reduced functionality suitable for pilot systems. It includes 10 device licenses though does not include any Power Quality reports. Upgradeable to Standard License
Device Licenses	Required license to enable monitoring devices in PME. Individual licenses for entry level, mid-range and high-end device types. Third party devices with Modbus interface require mid-range licenses.
Client Access License	Assigned to system users. Required if there are additional users who should access system.
Software Module License	Optional licenses that enable additional reports and dashboard functionality: <ul style="list-style-type: none"> •Backup Power Management Module •Capacity Management Module •Energy Analysis Reports Module •Event Notification Module •Power Quality Performance Module •Breaker Performance Module •Energy Analysis Dashboard Module •Energy Billing Module •Insulation Monitoring Module
Data Exchange Module	Optional license that enables data exchange with external systems with PME as OPC DA server or Modbus Slave.
Software Assurance	1 year or 3-year options available. Ordered using credits calculated based on system devices and modules. Must be selected if an upgrade of software to the latest version is required.
SQL Server License	Optional license for Microsoft SQL Database Server. Free SQL Server Express version included with PME installation though with database size limitation of up to 10GB.

The Base Licenses include Energy Management reports such as Calender Trend Reports, Consumption Ranking Report, Energy Cost Report, Load Profile Report and Energy Usage Report based on Shift and Time of Use(TOU) schedule. The Standard base license also features power quality reports such as EN50160-2000 compliance Reports, IEEE519-1992 Harmonic Compliance Reports, Reports showing severity of voltage sags, swells and transients, waveform signatures and CBEMA susceptibility curve plots.